

WHAT IS CLAIMED IS:

1. A method for writing data to a recording medium, said method comprising:

writing in each sector of a series of sectors of the recording medium in which data is to be written caused by a single data write request location information which is information indicating a location of the sector in the series of sectors and common information which varies every time data writing to the series of sectors occurs and is information set relating to the series of sectors.
2. A method for writing data according to claim 1, wherein

at least one of the following information is set in the location information:

information indicating that the sector is a head sector of the series of sectors;

information indicating that the sector is a tail sector of the series of sectors;

information indicating that the sector is neither a head sector nor a tail sector of the series of sectors.
3. A method for writing data to a recording medium according to claim 1, wherein the recording medium is a magnetic disk.
4. A method for validating data comprising the steps of:

writing in each sector of a series of sectors

of a recording medium in which data is to be written caused by a single data write request location information which is information indicating a location of the sector in the series of sectors and common information which varies every time data writing to the series of sectors occurs and is information set relating to the series of sectors;

reading out the location information and the common information which are written in each sector of the continuous sectors of the recording medium;

validating data based on the read out location information and common information.

5. A method for validating data according to claim 4, wherein the step of validating data is the step of:

validating data stored in a sector by deciding whether the common data of the sector is the same as the common data of a sector immediately before the sector when the location information of the sector is information indicating that the sector is neither a head sector nor a tail sector of the series of sectors.

6. A method for controlling a computer constructed comprising

a communication control unit which provides a function to communicate with an external device;

an I/O control unit which writes and reads data to and from a recording medium;

a cash memory which the communication control

unit and the I/O control unit can access; said method comprising the steps of:

the communication control unit receives a data write request from the external device;

the communication control unit writes in data to be written in each sector of a series of sectors of the recording medium in which data is to be written caused by the data write request location information which is information indicating a location of the sector in the series of sectors and common information which varies every time data writing to the series of sectors occurs and is information set relating to the series of sectors.

7. A method for controlling a computer constructed comprising

a communication control unit which provides a function to communicate with an external device;

an I/O control unit which writes and reads data to and from a recording medium;

a cash memory which the communication control unit and the I/O control unit can access; said method comprising the steps of:

the communication control unit receives a data write request from the external device;

the I/O control unit adds to data to be written in each sector of a series of sectors of the recording medium in which data is to be written caused by the data write request location information which is

information indicating a location of the sector in the series of sectors and common information which varies every time data writing to the series of sectors occurs and is information set relating to the series of sectors.

8. A method for controlling a computer constructed comprising

- a communication control unit which provides a function to communicate with an external device;

- an I/O control unit which writes and reads data to and from a recording medium;

- a cash memory which the communication control unit and the I/O control unit can access; said method comprising the steps of:

- the communication control unit receives a data write request from the external device;

- the communication control unit writes in data to be written in each sector of a series of sectors of the recording medium in which data is to be written caused by the data write request location information which is information indicating a location of the sector in the series of sectors and common information which varies every time data writing to the series of sectors occurs and is information set relating to the series of sectors;

- the I/O control unit reads out the location information and the common information written in each continuous sector of the recording medium when the

communication control unit receives a data read request from the external device;

the communication control unit validates data based on the read out location information and common information.

9. A method for controlling a computer constructed comprising a communication control unit which provides a function to communicate with an external device;

an I/O control unit which writes and reads data to and from a recording medium;

a cash memory which the communication control unit and the I/O control unit can access; said method comprising the steps of:

the communication control unit receives a data write request from the external device;

the communication control unit writes in data to be written in each sector of a series of sectors of the recording medium in which data is to be written caused by the data write request location information which is information indicating a location of the sector in the series of sectors and common information which varies every time data writing to the series of sectors occurs and is information set relating to the series of sectors;

the I/O control unit reads out the location information and the common information written in each continuous sector of the recording medium when the

communication control unit receives a data read request from the external device, and validates data based on the read out location information and common information.

10. A computer comprising:

a communication control unit which provides a function to communicate with an external device;

an I/O control unit which writes and reads data to and from a recording medium;

a cash memory which the communication control unit and the I/O control unit can access;

means for writing in data to be written in each sector of a series of sectors of the recording medium in which data is to be written caused by a data write request location information which is information indicating a location of the sector in the series of sectors and common information which varies every time data writing to the series of sectors occurs and is information set relating to the series of sectors when it receives the data write request from the external device;

means for reading out the location information and the common information written in each continuous sector of the recording medium when it receives a data read request from the external device;

means for validating data based on the read out location information and common information.

11. A disk array unit comprising a plurality of

disk drives, a disk controller which controls writing and reading of data to the disk drive by the RAID5 method, wherein:

when writing data to the disk drive according to the read modify write method, the disk array unit writes in each sector of a series of sectors of the recording medium in which data is to be written caused by a single data write request location information which is information indicating a location of the sector in the series of sectors and common information which varies every time data writing to the series of sectors occurs and is information set relating to the series of sectors.

12. A disk drive comprising:

a magnetic disk;

communication means for communicating with an external device;

access means for writing and reading data to and from the magnetic disk corresponding to a control signal received by the communication means;

write means for writing in each sector of a series of sectors of the recording medium in which data is to be written caused by a single data write request location information which is information indicating a location of the sector in the series of sectors and common information which varies every time data writing to the series of sectors occurs and is information set relating to the series of sectors.

13. A disk drive comprising:
a magnetic disk;
communication means for communicating with an external device;

access means for writing and reading data to and from the magnetic disk corresponding to a control signal received by the communication means;

validation means which reads out the location information and the common information written in each continuous sector of the recording medium and validates data based on the read out location information and common information.

14. A disk drive comprising:
a magnetic disk;
communication means for communicating with an external device;

access means for writing and reading data to and from the magnetic disk corresponding to a control signal received at communication means;

validation means which reads out the location information and the common information written in each continuous sector of the recording medium and validates data based on the read out location information and common information;

signal output means which outputs a signal indicating that an abnormality has occurred when an abnormality is detected by the validation.